

A FAST INITIAL ACQUISITION & SEARCH DEVICE FOR A SPREAD SPECTRUM
COMMUNICATION SYSTEM

ABSTRACT OF THE DISCLOSURE

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A fast initial acquisition and search device for a spread spectrum communication system is disclosed herein. The search device includes a memory for storing the first code sequence, and a plurality of computation circuits coupled in parallel to the memory. The search device also includes a plurality of threshold detector circuits. Each of the plurality of
10 threshold detector circuits is respectively coupled to one of the plurality of computation circuits. Each of the plurality of computation circuits implements a unique phase offset for a second code sequence with respect to the first code sequence. A correlation operation is performed in parallel at each of the plurality of computation circuits followed by a threshold evaluation that indicates whether the correlation result satisfied a threshold value.

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